

## II. IN THE CLAIMS

1. (Currently Amended) A method for determining a compact model to transcribe a

language acoustically based on well-defined basic phonetics, said method comprising:

extracting phonetic information regarding said language;

defining, based on said extracted information, phonological and phonetic units associated with said language;

identifying variations in said language;

developing a maximal set based on said defined phonological units, phonetic units, and identified variations in said language, and

reducing said maximal set to a minimal set of phonemes and allophones wherein said reducing said maximal set further comprises reducing a text-to-speech phonetics set,

thereby providing for a compact model for acoustically transcribing said language.

2. (Original) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 1, wherein said step of extracting information further comprises:

identifying terminological problems associated with said language;

identifying transcription problems associated with said language;

extracting all phonological and phonetic units associated with said language, and

selecting a representative symbol for the transcription alphabet.

3. (Original) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 1, wherein said maximal set comprises any of, or a combination of: phonemes, allophones, rules governing the selection of allophones, a set of examples, and transliteration symbols.

4. (Original) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 1, wherein said step of reducing said maximal set further comprises reducing an automatic speech recognition phonetic set.
5. (Original) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 4, wherein said step of reducing an automatic speech recognition phonetic set further comprises the use of diacritics, graphemes, and allophones.
6. (Canceled) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 1, wherein said step of reducing said maximal set further comprises reducing a text-to-speech phonetics set.
7. (Currently Amended) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim ~~6~~ 1, wherein said ~~step~~ ~~of reducing an~~ text-to-speech phonetics set is accomplished by using allophones and adding symbols representing the phoneme to be geminated.
8. (Currently Amended) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim ~~4~~ 2, wherein said transcription alphabet is in compliance with the International Phonetics Alphabet (IPA).
9. (Original) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 1, wherein said language is any of the following: modern standard Arabic (MSA), classical Arabic, or colloquial Arabic.

10. (Original) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 1, wherein said phonetic information is extracted over a network.

11. (Currently Amended) A method for determining a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 2 10, wherein said network is any of the following networks: local area networks (LAN), wide area networks (WAN), Internet, HTTP-based networks, or wireless networks.

12. (Currently Amended) A voice control system utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, said system comprising:

 a computer system;

a microphone, said microphone interfacing with said computer system, said microphone capable of receiving voice input in said language,

a multimedia kit including full duplex sound card, said multimedia kit interfacing with said computer system, and said multimedia kit receiving said voice inputs from said microphone, and

said computer system receiving said voice input from said multimedia kit and phonetically analyzing said voice inputs using a stored compact set of phonetic alphabets including a reduced text-to-speech phonetics set thereby enabling translation of voice-to-text based on said stored compact set of phonetic alphabets.

13. (Original) A voice control system utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 12, wherein said multimedia kit further comprises a built-in automatic speech recognition (ASR) utility.

14. (Original) A voice control system utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 12, wherein said multimedia kit recognizes human voice and interprets it into corresponding actions without being speaker dependent.

15. (Currently Amended) A voice control system utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 14, wherein said speaker ~~dependant~~ dependent includes gender or age.

16. (Original) A voice control system utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 12, wherein said compact set of phonetic alphabets is accomplished using diacritics, graphemes, and allophones.

17. (Original) A voice control system utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 12, wherein said compact set of phonetic alphabets are compliant with the International Phonetics Alphabet (IPA) standard.

18. (Original) A voice control system utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 12, wherein said language is any of the following: modern standard Arabic, classical Arabic, or colloquial Arabic.

19. (Currently Amended) A voice control method utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, said method comprising:

receiving voice inputs in said language via a microphone;

phonetically analyzing said received voice inputs using a computer-based system, and

said computer-based system analyzing said voice input using a stored compact set of phonetic alphabets including a reduced text-to-speech phonetics set, thereby enabling translation of voice-to-text based on said stored compact set of phonetic alphabets.

20. (Original) A voice control method utilizing a compact model to transcribe a language acoustically based on well-defined basic phonetics, as per claim 19, wherein said compact set of phonetic alphabets is accomplished using diacritics, graphemes, and allophones.

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